

359342 PM 977/IMPROVED METHOD OF BLENDING RECONSTITUTED TOBACCO IN FILLER

J. Osmalov and F. Sherwood  
Laboratory Administration/Thomson  
Tobacco Fundamentals/Watson/Turano

Sheet product of a reconstituted tobacco process is cut and shredded separately from other components of a cigarette filler, and is then blended with the shredded strip and the like already dried to making moisture.

Inskeep  
3-18-82 Filed in PTO; assignment recorded.  
6-11-82 Prior art statement.

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366434 PM 991/TOBACCO MASS TREATMENT METHOD

J. Davis, Jr. and H. Wilkerson  
Engineering/Taylor/Kay

A method for quickly conditioning a mass of tobacco uniformly throughout the mass with steam for the purpose of moisturizing and heating the tobacco evenly throughout. A probe is provided to be inserted within the mass of tobacco for drawing a vacuum while steam is applied to the tobacco mass. A temperature sensor is mounted on the probe to indicate the temperature of inner mass of tobacco. Steam is applied until a desired temperature is sensed at the sensor. The application of steam is continued at that temperature for a period adequate to moisturize and sterilize the tobacco throughout.

Sarofeen  
4-7-82 Filed in PTO; assignment recorded.  
10-26-8 Preliminary amendment.

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φ0000015410

368873 PM 1038/PROCESS FOR INCREASING THE FILLING POWER OF TOBACCO  
LAMINA FILLER HAVING A LOW INITIAL MOISTURE CONTENT

G. Keritsis and H. Sun  
Tobacco Fundamentals/Watson/Turano

A process is disclosed for increasing the filling power of tobacco lamina filler having an OV value, immediately before treatment, within the range of from about 1% to about 10%, preferably from about 2% to about 7%, without the use of exogenous impregnants by contacting the filler with a high velocity gaseous medium at elevated temperature such that heat is rapidly and substantially uniformly transferred from the medium to the filler for a total contact time sufficient to stiffen and expand the filler.

Inskeep/F&N/Shaw  
4-15-82 Filed in PTO.  
8-5-82 Assignment recorded.

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373901 PM 944/SMOKING COMPOSITIONS

E. Southwick and H. Grubbs  
Chemical Research/Sanders/Osdene

In one of its embodiments this invention provides a smoking composition which contains a novel type of flavorant additive as exemplified by polymerized ethyl 2-propenyl 2-(2-butyl)malonate.

Inskeep/D&O  
5-3-82 Filed in PTO; assignment recorded.

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0000015411

375741 PM 813D Cont./OPTICAL PERFORATING APPARATUS AND SYSTEM

E. Cashwell  
Engineering/Kay/Taylor

Optical perforation apparatus including a rotatable assembly having first and second light reflective means supported in spaced succession for rotation about the assembly rotational axis. Each light reflective means is provided with light reflective elements arranged in a locus about the rotational axis. At least one of the means is additionally provided with light transmissive portions each arranged between mutually disposed of its light reflective elements and in alignment with a light reflective element of the other means. The light reflective elements of each means are further arranged at non-orthogonal angles to the assembly axis, thereby permitting parallel orientation of the latter axis and the laser beam.

Sarofeen/F&N/Shaw

6-8-79 Filed in PTO; assignment recorded.  
5-2-80 Action rejecting all claims.  
7-18-80 Amendment.  
12-3-80 Action rejecting all claims.  
2-27-81 Request for 1-month extension. Approved.  
4-2-81 Amendment.  
4-30-81 Change in power of attorney.  
10-6-81 Final rejection (response due 1-6-82)--to F&N.  
12-7-81 Request for 1-month extension. Approved.  
12-11-81 New associate power of attorney for F&N.  
2-6-82 Amendment.  
3-5-82 Notice of appeal.  
4-6-82 Change in power accepted.  
5-6-82 SN 046808 abandoned and continuation and prior art statement filed in PTO.  
5-25-82 Notice of allowance in SN 046808

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0000015412

377859 PM 813A DIV Cont. II/LIGHT ENERGY PERFORATION APPARATUS AND SYSTEM

G. Taylor and R. Scherer  
Engineering/Kay/Taylor

Apparatus for generating pulsed light beams from a focused continuous laser beam includes reflector discs which are rotated about a common rotational axis. The discs include peripheral reflective facets which confront the laser beam in the course of rotation and also have light transmissive portions between adjacent facets. The facets and transmissive portions of successive discs are selectively misaligned such that pulsed beams issue successively from different discs. A system employing the apparatus for perforation of a web also includes a common lens per disc pair and a prism for deviating light issuing from one disc of the disc pair.

Sarofeen/F&N/Giannetti

- 9-21-79 Application, preliminary amendment, statement and accompanying declarations and supporting evidence for instituting an interference filed in PTO; assignment recorded.  
3-80 Prior art statement.  
2-25-81 Action rejecting all claims (response due 25 May)--to F&N.  
5-11-82 Change in power of attorney.  
5-18-81 Request for 1-month extension. Approved.  
5-20-81 Change in power accepted.  
6-19-81 Request for second 1-month extension. Approved.  
7-9-81 Associate power of attorney for F&N.  
8-17-81 Supplemental citation of art.  
11-18-81 Final rejection (response due 18 February).  
7-23-81 Continuation II of SN 077638 filed in PTO (see also Continuation I).  
5-18-82 SN 077638 abandoned for previously filed continuations I and II.

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377989 PM 893 DIV I/OPTICALLY ACTIVE NICOTINE ANALOGS AND PROCESS FOR THEIR PREPARATION

W. Edwards III  
Chemical Research/Sanders/Osdene

This invention provides a process for the preparation of cotinine and nicotine analogs containing substituents on pyrrolidinone/pyrrolidine ring at the 3' position of cotinine and at the 4' and 5' position of nicotine.

Inskeep/D&O  
5-13-82 Filed in PTO.

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0000015413

377990 PM 893 DIV I/OPTICALLY ACTIVE NICOTINE ANALOGS AND PROCESS FOR THEIR PREPARATION

W. Edwards III  
Chemical Research/Sanders/Osdene

This invention provides a process for the preparation of cotinine and nicotine analogs containing substituents on pyrrolidinone/pyrrolidine ring at the 3' position of cotinine and at the 4' and 5' position of nicotine.

Inskeep/D&O  
5-13-82 Filed in PTO.

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379556 PM 990 PROCESS FOR MAKING NON-COMBUSTIBLE CARBONIZED MATERIAL AND CARBON FILTER MADE OF SUCH MATERIAL

N. Rainer and C. McClung  
Tobacco Fundamentals/Watson/Turano

A process is provided for making non-combustible carbonized material, and carbon filters made of such material, according to which porous cellulosic material is contacted with a film-forming aqueous solution of an inorganic salt selected from the group consisting of alkali metal and ammonium silicates, carbonates, hydrophosphites, diphosphites, phosphites, hypophosphates, orthophosphates, diphosphates, triphosphates, polymetaphosphates, peroxy-monophosphates, peroxydiphosphates, orthoborates, metaborates, tetraborates and mixtures thereof so that the cellulosic material contains at least about 1%, preferably from about 2% to about 6%, of the salt on a dry weight basis and then pyrolyzing the treated cellulosic material in an inert atmosphere at a temperature of at least about 700°C., preferably from about 750°C. to about 900°C., under conditions such that at least about 15%, preferably from about 20% to about 40% of the initial weight of the cellulosic material remains after pyrolysis.

Related to 955.

Blish/F&N/Shaw  
5-18-82 Filed in PTO with preliminary amendment.  
8-5-82 Assignment recorded.  
10-19-82 Prior art statement.

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0000015414

395473 PM 1039/PROCESS FOR INCREASING THE FILLING POWER OF TOBACCO

J. Banyasz, C. Owens, E. Mooz, A. Lilly, P. Martin, H. Merritt, and B. Semp  
(Park 500)  
Biomaterials/Whidby/Farone  
Physical Research/Kassman/Farone  
Process Development/Turano

The present invention relates to a process for increasing the filling power of tobacco which comprises heating the tobacco at elevated temperature while maintaining the OV and SV values of the tobacco substantially constant. Preferably, the tobacco is heated at a temperature of at least about 80°C in a closed system for a time sufficient to increase the CV value of the tobacco.

Inskeep/F&N/Shaw  
7-6-82 Filed in PTO.  
11-2-82 Preliminary amendment and prior art statement.

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398128 PM 1098/TAMPER PROOF HINGE-LID PACK

W. David  
Engineering/Tew/Kay/Taylor

A hinged lid box, particularly adapted for packaging cigarettes wherein separable tabs are provided on each side of the box, the tabs being easily broken upon initial opening of the box to allow subsequent opening and closing of the box.

Schardt  
7-14-82 Filed in PTO; assignment recorded.

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0000015415

400776 PM 991 DIV/TOBACCO MASS APPARATUS

J. Davis and H. Wilkerson  
Engineering/Kay/Taylor

Apparatus for quickly conditioning a mass of tobacco uniformly throughout the mass with steam for the purpose of moisturizing and heating the tobacco evenly throughout.

Sarofeen  
7-22-82 Filed in PTO; assignment recorded.

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401380 PM 1096/CIGARETTE

W. Houck, R. Newsome, W. Nichols, and R. Thesing  
Cigarette Development/Gauvin/Meyer

A cigarette is provided which comprises a tobacco rod, and an integral axially aligned substantially cylindrical assembly at the mouth end of the cigarette which preferably includes a wrapped cylindrical filter plug and tipping paper, and which is provided with means to adjust the air dilution value of the cigarette. The assembly has first and second ends, which are open to permit the passage of air and smoke, and at least two openings in addition to the open ends. Means are provided for rotating one opening relative to the other so that the openings are in varying degrees of registry to permit varying amounts of air to combine with and dilute the smoke.

Sarofeen/F&N/Shaw  
7-23-82 Filed in PTO; assignment recorded.  
12-14-82 Preliminary amendment and prior art statement.

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0000015416

404349 PM 857/LENS MOUNT

E. Grollmund  
Engineering/Kay/Pasquine

A precisely-adjustable lens mount is disclosed, comprising a lens holder having threads on a portion of its surface and a support for the lens holder, having a threaded portion threadedly engaging the lens holder threads. The threaded portion of either the lens holder or the support includes at least a portion that is resilient in a direction away from the threaded portion of the other, to allow the threads of the support and of the lens holder to engage each other with preloading to prevent the lens from shifting from its desired location.

Sarofeen/F&N/Diana  
7-30-82 Filed in PTO; assignment recorded.

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404784 PM 954/CIGARETTE MAKING WITH TEMPERATURE CONDITIONING

J. Remington

A method and apparatus for producing a tobacco rod of predictable characteristics whereby the tobacco filler is tempered prior to forming into a rod in a cigarette making apparatus. The tobacco filler is tempered prior to entry into the maker region to a temperature of between 32 to 180°F. Heat exchange coils are provided in a feed chamber wherein the tobacco filler is recirculated for tempering to desired temperature prior to being fed to the maker on a continuous basis.

Sarofeen  
8-3-82 Filed in PTO; assignment recorded.

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0000015417



410195 PM 1010/HEATED DIE FOR CARBONIZED MATERIAL

D. Full  
Biomaterials/Whidby/Farone

A heated die is divided into four segments slidable with respect to adjacent segments so that when opposing segments move together and forward, other segments are moving out and back. Thus, friable material may be formed and drawn through the dye by the action of the dye.

Blish  
8-23-82 Filed in PTO; assignment recorded.  
12- -82 Prior art statement.

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410205 PM 894/1,4-DIACYLPIPERAZINE FLAVORED SMOKING COMPOSITIONS

W. Edwards and Y. Houminer  
Chemical Research/Sanders/Osdene

This invention provides smoking compositions which contain a diacylpipezazine additive such as 1,4-(2-methyl-propionyl)-2,3,5,6-tetramethylpipezazine. The preferred diacylpipezazine additives impart enhanced flavor response and smoothness.

Inskeep/D&O  
8-23-82 Filed in PTO; assignment recorded.  
11-26-82 Prior art statement.

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415307 PM 1091/TOOL STEEL CORK KNIVES

A. Gillespie and A. Pasquine  
Engineering/Taylor/Kay

A cigarette tipping apparatus having a cork drum cooperating with a cork cutting knife to sever cork tipping paper. The cutting knife is made of a wear-resistant material which is softer than the cutting surface.

Gregory  
9-7-82 Filed in PTO; assignment recorded.

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0000015418

416769 PM 913B/CONTINUOUS PROCESS FOR MICROBIAL DEGRADATION OF TOBACCO CONSTITUENTS CONTAINING NITRATES

H. Gaisch and D. Schulthess  
FTR

Microbial degradation of nitrates in a tobacco extract takes place in a first fermenter under exponential growth condition of the micro-organisms employed and subsequently in a second fermenter under stationary conditions of life of the degrading micro-organisms. In the first fermenter, carbohydrates are added, whilst in the second fermenter the depot carbohydrates which the micro-organisms have stored in the first fermenter are utilised.

Inskeep/F&N/Haley  
9-9-82 Filed in PTO; assignment recorded.  
11-5-82 Priority document submitted.  
11-17-82 Letter to PTO re declaration.

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417271 PM 1095/SMOKING COMPOSITIONS

W. Chan  
Chemical Research/Sanders/Osdene

A non-volatile source of ketone to flavor tobacco smoke is provided by a beta-ketocarboxylic acid ester of a sugar or related compound. The ester is applied to the smoking material and remains in place until the burning coal releases the ketone.

Inskeep  
9-13-82 Filed in PTO.  
12-28-82 Prior art statement.

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0000015419

420834 PM 689/PROCESS FOR MAINTAINING INCREASED FILLING POWER OF TOBACCO PRODUCTS

G. Keritsis  
Tobacco Fundamentals/Watson/Turano

A process for maintaining increased filling power of tobacco products, in which an effective amount of at least one cross-linking agent is applied to the tobacco products and reacted with various components therein. The cross-linking agent may be applied directly or in the form of a solution, and is preferably employed in conjunction with an expansion treatment of the tobacco products.

Related to 641; see also 653.

Inskeep/F&N/Spitals  
9-21-82 Filed in PTO.

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421922 PM 1080/SMOKING COMPOSITIONS CONTAINING NOVEL ACYLPYRAZINE FLAVORANTS

D. Williams, E. Southwick, and Y. Houminer  
Chemical Research/Sanders/Osdene

In one of its embodiments the present invention provides a smoking composition which contains a novel type of bicyclic acylpyrazine flavorant additive as exemplified by 2-acetyl-5,6,7,8-tetrahydroxyclohexa[b]pyrazine.

Inskeep/D&O  
9-23-82 Filed in PTO.

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423070 PM 1042/A SELF-CLEANING POROSIMETER

E. Grollimund, W. Smick, D. Brookman  
Engineering/Taylor/Kay

A high-speed dynamic porosimeter including a device for removing accumulated dust is disclosed. The porosimeter has an apertured surface, preferably curved, across which a web whose porosity is to be measured is drawn while suction is applied to the apertures. A pressure transducer monitors the pressure in a sensor line or chamber, which pressure varies as a function of the porosity of the web. A scraper blade scrapes dust from the apertured surface from time to time. Preferably, vacuum suction is also applied to a slot at the upstream side of the apertured surface to ensure a good seal between the web and the surface.

Sarofeen/F&N/Diana  
9-24-82 Filed in PTO.

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0000015420

424815 PM 992/MECHANICAL DECHOKER DEVICE

J. Gregory III  
Engineering/Taylor/Kay

Tobacco traveling upward in a chimney is decelerated prior to striking a suction belt in order to prevent breakage by diverting part of the air flow through a screen. Periodic chokes in the screen are cleared by mechanically rotating the dechoker device 90° counter-clockwise so that the air flow which is normally diverted through the dechoker device flows through the screen in the opposite direction, clearing the screen of tobacco.

Blish  
9-27-82 Filed in PTO.  
11-16-82 Notice of incomplete papers.  
11-22-82 Response.

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429354 PM 1111/FILTER CIGARETTE

W. Nichols and R. Newsome  
Cigarette Development/Gauvin/Meyer

A filter cigarette is provided which comprises a tobacco rod, an integral, axially aligned substantially cylindrical wrapped filter plug at the mouth end of the tobacco rod, and tipping paper surrounding the filter plug. The filter plug has first and second ends, which are open to permit the passage of air and smoke. The plug wrap is divided into a mouth-end band, a central band, and a rod-end band having an opening therethrough. The first and third bands are attached to the filter. The tipping paper circumscribes the filter plug and extends from the mouth end of the filter plug to a position on the tobacco rod adjacent to the rod end of the filter plug. The tipping paper is divided into first and second bands, the first band extending from the mouth end to a position adjacent the tobacco rod overlying the third band of the plug wrap. The second band of the tipping paper abuts the first band of the tipping paper and overlaps and attaches the rod end of the filter to the abutting end of the tobacco rod. The first band of the tipping paper has an opening therein which is positioned in registry with an opening in the third band of the plug wrap. The first band of the tipping paper is attached to the plug wrap only at the central band for rotation therewith about the longitudinal axis of the filter, whereby the opening in the tipping paper is rotated into varying degrees of registry with the opening in the underlying plug wrap to permit varying amounts of air to combine with the smoke, thereby varying the air dilution value of the cigarette.

Sarofeen/F&N/Shaw  
9-30-82 Filed in PTO.

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0000015421

429391 PM 1094/SHORT CYCLONE SEPARATOR

R. Gaudlitz  
Tobacco Processing and Fabrication/Knudson/Turano

A short cyclone separator utilizing a ramped inlet passageway into the separation chamber to eliminate the recirculating stream in the top portion of the inlet section which otherwise develops and a baffle positioned across the separation chamber to shorten the separation chamber and to create an annular gap between the edge of the baffle and the chamber wall. The mixed stream enters the chamber via the helical inlet and the denser component slides along the chamber wall through the annular gap while the lighter component is deflected by means of the baffle upward through the centrally disposed discharge provided therefor. Vertical vanes radially disposed about a central hub positioned below the baffle direct conditioning gas radially out and up through the annulus generally countercurrent to the flow of the heavier component to thereby cool and decelerate the heavier component.

Gregory  
9-30-82 Filed in PTO.

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429392 PM 1110/ADJUSTABLE FILTER CIGARETTE

W. Nichols and R. Newsome  
Cigarette Development/Gauvin/Meyer

A filter cigarette is provided which comprises a tobacco rod which includes a charge of tobacco wrapped in cigarette paper, an integral, axially aligned cylindrical filter plug, and tipping paper. The filter plug is divided into first and second segments with the first segment being rotatable with respect to the second segment. Rotation of the first segment with respect to the second segment, in one embodiment of the invention, serves to vary the air dilution value of the cigarette. In another embodiment, rotation of the first segment with respect to the second segment produces variable resistance-to-draw in the cigarette. Both of the above embodiments can be combined into yet another embodiment to produce a cigarette which maintains a constant resistance-to-draw value as the air dilution value is varied. In yet another embodiment, an encapsulated flavorant is provided which is released responsive to rotation of the first segment with respect to the second segment. The flavorant release embodiment can be combined with the other embodiments.

Sarofeen/F&N/Shaw  
9-30-82 Filed in PTO.

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0000015422

429393 PM 1126/FILTER CIGARETTE

W. Nichols, R. Newsome, W. Geiszler  
Cigarette Development/Gauvin/Meyer

A filter cigarette is provided which has a wrapped filter plug aligned to end-to-end abutting relationship with a substantially cylindrical tobacco rod. The filter plug and tobacco rod are circumscribed and joined by a substantially air permeable first layer of tipping paper. Circumscribing the first layer of tipping paper is a second layer of substantially air impermeable tipping paper. The second layer has a circumferentially extending rod of closely spaced perforations intermediate the two ends of the second layer which divides it into a mouth-end sleeve attached to the first layer at the mouth end of the cigarette and a second rod-end sleeve detachable from the mouth end sleeve by rotating the sleeve relative to the first sleeve so that it can move axially between the mouth-end sleeve and positions along the tobacco rod allowing air to enter the filter through the exposed portions of the air permeable layers.

Sarofeen/F&N/Shaw  
9-30-82 Filed in PTO.

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429394 PM 1125/FILTER CIGARETTE

W. Houck, W. Nichols, and R. Newsome  
Cigarette Development/Gauvin/Meyer

A filter cigarette is provided which is adjustable to provide a wide range of air dilution and/or RTD values and which comprises a tobacco rod, a substantially cylindrical filter plug and substantially air impermeable tipping paper. The filter plug comprises a first, mouth-end segment and a second, axially aligned, rod-end segment spaced apart from the first segment. The wrapping, which is substantially air impermeable, circumscribes the first and second segments defining a substantially cylindrical void therebetween which may include means for releasing varying amounts of a flavorant. The first segment is movable towards the second segment thereby compressing the plug wrap between the segments which decreases the volume of the void and increases the RTD value of the cigarette. Variable air dilution is achieved by providing at least one opening in the tipping paper and at least one opening in the underlying plug wrap positioned such that, as the first segment is moved axially towards the second segment, the first and second openings are moved into varying degrees of registry, thereby admitting varying amounts of air to the filter.

Sarofeen/F&N/Shaw  
9-30-82 Filed in PTO.

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0000015423

429406 PM 1104/METHOD AND APPARATUS FOR TESTING PACKAGE SEALS

P. Martin and W. Gentry  
Physical Research/Kassman/Farone

A method and apparatus for testing a package overwrap seal. The apparatus includes a means to supply a flow of a fluid such as air into the package, means to indicate the flowrate and pressure of the flow of fluid, means to hold the package without affecting the seals and in one embodiment, means for submerging the package in a second fluid. According to the method, a flowrate of fluid is introduced into the package functions of the pressure and flowrate are detected and compared to empirical data to determine acceptability. Moreover, pressure may be applied to the seal locations to detect, by a change in indicated pressure or flowrate, a leak location. Additionally, the package may be submerged in a second fluid to reveal the leak locations.

Gregory  
9-30-82 Filed in PTO.

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437414 PM 1052/POSITIVE PLUG FEED APPARATUS

M. Barden, W. Pettigrew, A. Collins  
Engineering/Kay/Taylor

A positive plug feed apparatus is disclosed wherein an upper lug belt and lower lug belt form an inclined expanding throat which forces filter plugs into a reservoir. The incline of the throat is such that the filter plugs enter the reservoir along the shear lines of the stacked filter plugs and reservoir thus reducing the force necessary to push new filter plugs into the partially full reservoir.

Blish  
10-28-82 Filed in PTO.

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0000015424

440463 PM 1123/TOBACCO BALE STEAM INJECTION

R. Smith  
Engineering/Kay/Taylor

A method and apparatus for steam injection of tobacco bales for use in the opening process. In the apparatus, at least one orificed steam injection plate is brought in flush contact with a tobacco bale that is stationary or in motion and steam is caused to emit from the orifice and is thereby injected into the bale moistening, conditioning and loosening the bonds between the tobacco leaves. In the method, as the tobacco bale is conveyed past the steam injection orifice plate, the plate is moved in flush contact therewith, steam is supplied to the plate and emits therefrom through the orifices to penetrate the tobacco bale. The bale so conditioned is subsequently broken up by a rotating cylinder.

Gregory  
11-9-82 Filed in PTO.

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442471 PM 1122/METHOD AND APPARATUS FOR USING SMALL LAMINA TOBACCO IN CIGARETTES

C. Bates, S. Giddings, A. Roberts, and L. Turano  
Tobacco Product Standards  
Process Development

A method and apparatus for adding small lamina tobacco to cigarettes is disclosed. The small lamina recovered from the tobacco threshing process is passed through a 4 mesh screen to remove large particles, passed over a 16 mesh screen to remove dust and undersized particles, passed through a separator to remove veins, stems, and fibers, passed over a weighbelt, and then mixed with cut dried filler tobacco.

Blish  
11-17-82 Filed in PTO.

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0000015425



444928 PM 1092/AIR-CURED BRIGHT TOBACCO FILLER, BLENDS AND SMOKING ARTICLES

D. Teng  
Biomaterials/Whidby/Farone

A novel tobacco for smoking articles which is an air-cured bright tobacco harvested by stalk cutting, priming, or a combination of partial priming followed by stalk cutting, and characterized by a total reducing sugar content within the range of from 0 to about 6%, a chlorogenic acid content within the range of from 0 to about 0.4%, a rutin content within the range of from 0 to about 0.2%, a hot water solubles content within the range of from about 45 to about 55%, a total ash content within the range of from about 12 to about 26%, a combined proline and threonine content within the range of from 0 to about 1 mg/g, a combined aspartic acid and asparagine content within the range of from about 0.5 to about 7 mg/g, and a combined glutamic acid and glutamine content within the range of from about 0.5 to about 1.6 mg/g; all measurements being on a dry weight basis. This novel tobacco, when formulated as a smoking article, such as a cigarette, and smoked, presents the aroma and taste of a blended tobacco smoking article and may be substituted in whole or in part for burley tobacco in blended tobaccos while substantially maintaining the subjective qualities of the burley tobacco and yet, as compared to the burley tobacco-containing blends, provides a reduced NO content in the smoke.

Inskeep/F&N/Shaw  
11-26-82 Filed in PTO.

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0000015426

PM 653/FOAMED, EXTRUDED, TOBACCO-CONTAINING SMOKING ARTICLE  
AND METHOD OF MAKING SAME

G. Keritsis and W. Nichols  
Tobacco Fundamentals/Watson/Turano

A substantially cylindrical foamed, extruded, tobacco-containing smoking article is provided which has properties substantially equivalent to those of a conventional cigarette and which contains from about 5 to about 98 wt. % of tobacco particles having a particle size of up to about 5 mesh, from 0 to about 60 wt. % of a filler having a particle size of up to about 5 mesh, from about 2 to about 40 wt. % of a cellulosic binder selected from the group consisting of hydroxypropyl cellulose, carboxymethyl cellulose, and its sodium, potassium and ammonium salts, cross-linked carboxymethyl cellulose, and its sodium, potassium, and ammonium salts, hydroxyethyl cellulose, ethyl hydroxyethyl cellulose, hydroxypropyl methyl cellulose, methyl cellulose, ethyl cellulose, and mixtures thereof, and from about 5 to about 20 wt. % water. The article has a density within the range of from about 0.05 to about 1.5 g/cc. The method of making such articles comprises the steps of (a) dry blending from about 5 to about 98 wt. % of the tobacco particles having an OV value of from about 3 to about 20%, with from 0 to about 60 wt. % of a filler and having a particle size of up to about 5 mesh, and from about 5 to about 40 wt. % of the cellulosic binder; then (b) admixing this dry blend with water to form a wet blend containing from about 15 to about 50 wt. % of water; then (c) extruding the wet blend under extrusion conditions of temperature and pressure such that as the wet blend is extruded the moisture in the blend is converted to steam thereby foaming the article.

Related to 641 and 1038; see also 689.

Inskeep/F&N/Shaw  
11- -82 Filed in PTO.

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0000015427

PM 735A Cont. III/METHOD AND APPARATUS FOR THE MANUFACTURE OF  
SELF-SUPPORTING POROUS STRUCTURES

G. Mathe, T. Laszlo, and J. Nienow

In making self-supporting porous elements of type having fibers fused together at points of contiguity thereof, a bonding constituent is selected having microwave absorptivity in excess of that of the fiber material. Filamentary tow defining the fibers is spread and selectively uncrimped and the bonding constituent is applied thereto. The tow is then cylindrically shaped and conducted through a passage in microwave applicator apparatus of type tunable to optimize heating selectively of the bonding constituent whereby such point of contiguity fusion of the fibers is accommodated. Tow issuing from the microwave applicator is subjected to pressurized air.

Sarofeen/F&N/Diana

11-19-76 Filed in PTO.  
3-21-77 Action rejecting all claims.  
6-7-77 Request for 1-month extension. Approved.  
7-15-77 Amendment with accompanying declaration.  
10-11-77 Action rejecting all claims.  
1-3-78 Amendment.  
3-27-78 Final rejection.  
5-10-78 Notice of appeal.  
6-28-78 Request for 1-month extension.  
8-4-78 Appeal brief.  
11-78 Examiner's answer sustaining rejection.  
12-12-78 Request for 1-month extension. Approved.  
1-15-79 Reply brief.  
3-9-79 Supplemental examiner's answer sustaining rejection.  
1-22-80 Board of Appeals decision affirming examiner's rejection.  
3-18-80 SN 743511 abandoned and continuation filed in PTO.  
3-4-81 Action rejecting all claims (response due 4 June); to F&N (Schapira) for response.  
4-30-81 Change in power of attorney.  
5-19-81 Change in power accepted.  
5-21-81 Request for 1-month extension.  
6-26-81 SN 131682 abandoned and continuation II filed in PTO along with associate power of attorney for F&N.  
7-20-81 Advisory action.  
12-21-81 Action rejection all claims (response due 20 March)--to F&N.  
SN 277947 abandoned and continuation filed in PTO.

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0000015428

PM 813A DIV Cont. I/LIGHT ENERGY PERFORATION APPARATUS AND SYSTEM

G. Taylor and R. Scherer  
Engineering/Kay/Taylor

Apparatus for generating pulsed light beams from a focused continuous laser beam includes reflector discs which are rotated about a common rotational axis. The discs include peripheral reflective facets which confront the laser beam in the course of rotation and also have light transmissive portions between adjacent facets. The facets and transmissive portions of successive discs are selectively misaligned such that pulsed beams issue successively from different discs. A system employing the apparatus for perforation of a web also includes a common lens per disc pair and a prism for deviating light issuing from one disc of the disc pair.

Sarofeen/F&N/Giannetti  
7-23-81 Continuation I of SN 077368 filed in PTO (see also continuation II).  
5-18-82 SN 077638 abandoned for previously filed continuations I and II.

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PM 998/METHOD FOR CAPTURING AND UTILIZING LASER ENERGY

E. Grollmund  
Engineering/Kay/Taylor

An apparatus is disclosed for chopping a beam of radiant energy into three or more pulse trains propagating in different directions. The apparatus includes a disc rotating in a plane normal to the incident beam, having a circular pattern of reflective and transmissive portions. The reflective portions include first and second sets of surfaces inclined respectively at first and second oblique angles to the plane of the disc, for reflecting energy in first and second directions.

Sarofeen/F&N/Diana  
11- -82 Filed in PTO.

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0000015429

PM 1083/PROCESS FOR MAKING A CARBON HEAT SOURCE AND SMOKING  
ARTICLE INCLUDING THE HEAT SOURCE AND A FLAVOR GENERATOR

J. Hearn, H. Lanzillotti, and G. Burnett  
Flavor Development/Daylor/Meyer

The present invention relates to a process for producing a tasteless carbon heat source from a preformed article of a ligno-cellulosic material according to which the article is pyrolyzed in a continuously exchanged inert atmosphere at a temperature within the range of from about 800° to about 1100°C, for from about 0.5 to about 3 hours, then cooled in the inert atmosphere at a rate of from about 500° to about 10°C per hour to a temperature within the range of from about 275°C to about 25°C, and then subjected to at least one additional process step selected from an oxygen absorption step, a salt impregnation followed by heat treatment step, and a water desorption step. The present invention also relates to a smoking article including the carbon heat source, and a flavor generator comprising a substrate material containing at least one thermally releasable flavorant.

Gregory/F&N/Shaw  
12- -82 Filed in PTO.

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PM 1124/FILTER CIGARETTE

M. Hausermann  
R&D

A filter cigarette is provided which is adjustable to provide a wide range of air dilution values and which comprises a tobacco rod, a wrapped substantially cylindrical filter plug, and air transmissive tipping paper. The filter plug comprises a first mouth-end segment and a second, axially aligned, abutting rod-end segment which are joined such that the first segment is rotatable about the common axis. The second segment abuts and is joined to the tobacco rod. The wrapping is substantially air impermeable and has a plurality of first longitudinally extending, substantially air impermeable depressions spaced about the circumference of the first segment which are registrable with corresponding second, longitudinally extending, substantially air impermeable depressions spaced about the circumference of the second segment, such that as the first segment is rotated relative to the second segment, the degree of registry of the first and second depressions varies, thereby admitting varying amounts of air to the filter.

Sarofeen/F&N/Shaw  
11- -82 Filed in PTO.

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